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L46: Entry 1 of 1

File: DWPI

Oct 23, 1998

DERWENT-ACC-NO: 1999-016635

DERWENT-WEEK: 199902

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TITLE: Portable audio guidance apparatus for museum, amusement park - has personal computer to transmit guidance voice stored by memory unit to cellular telephones via base stations based on positional information relating to cellular telephones

PATENT-ASSIGNEE: VICTOR CO OF JAPAN (VICO)

PRIORITY-DATA: 1997JP-0102613 (April 4, 1997)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
JP 10285657 A	October 23, 1998		005	H04Q007/38

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
JP10285657A	April 4, 1997	1997JP-0102613	

INT-CL (IPC): H04H 1/00; H04Q 7/38; H04R 27/00

ABSTRACTED-PUB-NO: JP10285657A

BASIC-ABSTRACT:

The apparatus consists of several cellular telephones (12-1 - 12-4) carried by users connected to base stations (11-1 - 11-3) by a LAN (1). The telephones communicate with the base stations using radio signals. A memory (18) stores guidance data when an user is in the area covered by a base station. The memory is connected to the LAN.

The cellular telephones transmit their positional information to the base stations. A PC (21) transmits the guidance voice stored by the memory to cellular telephones via the base stations, based on their positional information.

ADVANTAGE - Suppresses noise. Transmits different guidance to various telephones based on positional information.

ABSTRACTED-PUB-NO: JP10285657A

EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/4

DERWENT-CLASS: W01 W02 W04

EPI-CODES: W01-A06B5A; W01-A06G3; W01-A07H2; W01-B05A1B; W01-C02G5B; W01-C05B5C; W02-C03C3F; W02-D; W04-S05;

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JAPANESE

[JP,10-285657,A]

CLAIMS DETAILED DESCRIPTION TECHNICAL FIELD PRIOR ART EFFECT OF THE
INVENTION TECHNICAL PROBLEM MEANS DESCRIPTION OF DRAWINGS DRAWINGS

[Translation done.] *page 1/1, 2/3, 1/1*

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CLAIMS

[Claim(s)]

[Claim 1] With two or more base transceiver stations which can transmit and receive a radio signal between the mobile-radio terminals which each of two or more users who move carries and by which each is being connected to LAN A storage means by which will consider a useful information as a voice guidance and it will be beforehand memorized if it acquires when the aforementioned user is in each area where two or more aforementioned base transceiver stations are stationed, Connect with the aforementioned LAN and the positional information of the aforementioned mobile-radio terminal is obtained through two or more aforementioned base transceiver stations. Voice guide equipment which has a voice guidance transmission-control means to control two or more aforementioned base transceiver stations to transmit the voice guidance for every area memorized by the aforementioned storage means based on the aforementioned positional information to each of the aforementioned mobile-radio terminal through the aforementioned base transceiver station.

[Claim 2] With two or more base transceiver stations which can transmit and receive a radio signal between the mobile-radio terminals which each of two or more users who move carries and by which each is being connected to LAN If it acquires when the aforementioned user is in each area where two or more aforementioned base transceiver stations are stationed, while a useful information will be considered as a voice guidance and will be memorized beforehand A storage means by which the information which shows the modality of the aforementioned voice guidance for every aforementioned mobile-radio terminal is memorized beforehand, Connect with the aforementioned LAN and the positional information of the aforementioned mobile-radio terminal is obtained through two or more aforementioned base transceiver stations.

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[The technical field to which invention belongs] this invention relates to the voice guide equipment for transmitting a useful information to an user by voice guidance in the current position especially to the user under move about a data transmission unit.

[0002]

[Description of the Prior Art] When it is going to transmit an information useful at the current position, i.e., an explanation of an exhibit, notes, etc., to the user under move in service areas, such as a museum and an amusement park, as use gestalt of this kind of voice guide equipment, the technique of a service area which fixes a loudspeaker and a head set to a position suitably, and broadcasts a voice guidance can be considered.

[0003]

[Problem(s) to be Solved by the Invention] However, by the technique of arranging a loudspeaker and broadcasting a voice guidance, there is a trouble where operation is troublesome for the user under move, by the calm **** *s use gestalt like an art gallery or a museum with the technique which there is a trouble of becoming an ambient noise and fixes a head set.

[0004] Furthermore, by the technique of arranging one loudspeaker and a head set in one area, there is a trouble where only one kind of voice guidance can be broadcast and the voice guidance from which each is different to two or more users cannot be broadcast, in one area. In addition, it can consider transmitting a voice guidance of the same content in English, German, and a language different like Chinese, for example as use gestalt which transmits the voice guidance from which each is different to two or more users.

[0005] this invention aims to let operation offer easy voice guide equipment, without becoming an ambient noise for an user in view of the above-mentioned trouble. this invention aims at offering the voice guide equipment which can transmit the voice guidance from which each is different to two or more users located in the same area again.

[0006]

[Means for Solving the Problem] In order that this invention may attain the above-mentioned purpose, in view of having established the link of LAN voice packet to LAN based on the current position of LAN radio terminal which is a mobile-radio terminal, it makes an user carry LAN wireless-telephone terminal, and transmits a voice guidance to LAN wireless-telephone terminal based on the current position. this invention transmits a voice guidance of a predetermined modality to predetermined LAN radio terminal again based on the information which shows the positional information of LAN wireless-telephone terminal, and the modality of voice guidance.

[0007] With namely, two or more base transceiver stations which can transmit and receive a radio signal between the mobile-radio terminals which each of two or more users who move carries according to this invention and by which each is being connected to LAN A storage means by which will consider a useful information as a voice guidance and it will be beforehand memorized if it acquires when the

aforementioned user is in each area where two or more aforementioned base transceiver stations are stationed, Connect with the aforementioned LAN and the positional information of the aforementioned mobile-radio terminal is obtained through two or more aforementioned base transceiver stations. The voice guide equipment which has a voice guidance transmission-control means to control two or more aforementioned base transceiver stations to transmit the voice guidance for every area memorized by the aforementioned storage means based on the aforementioned positional information to each of the aforementioned mobile-radio terminal through the aforementioned base transceiver station is offered.

[0008] With moreover, two or more base transceiver stations which can transmit and receive a radio signal between the mobile-radio terminals which each of two or more users who move carries according to this invention and by which each is being connected to LAN If it acquires when the aforementioned user is in each area where two or more aforementioned base transceiver stations are stationed, while a useful information will be considered as a voice guidance and will be memorized beforehand A storage means by which the information which shows the modality of the aforementioned voice guidance for every aforementioned mobile-radio terminal is memorized beforehand, Connect with the aforementioned LAN and the positional information of the aforementioned mobile-radio terminal is obtained through two or more aforementioned base transceiver stations. For every area memorized by the aforementioned storage means based on the information which shows the aforementioned positional information and the modality of the aforementioned voice guidance And the voice guide equipment which has a voice guidance transmission-control means to control two or more aforementioned base transceiver stations to transmit the aforementioned voice guidance of the modality specified using the information which shows the modality of the aforementioned voice guidance to each of the aforementioned mobile-radio terminal through the aforementioned base transceiver station is offered.

[0009]

[Embodiments of the Invention] Hereafter, the gestalt of operation of this invention is explained with reference to a drawing. Explanatory drawing and the drawing 4 showing the table of the modality of the positional information the block diagram showing the 1 operation gestalt of the voice guide equipment which drawing 1 requires for this invention, explanatory drawing showing the voice guidance table on which drawing 2 is registered into the personal computer of drawing 1, and the drawing 3 are remembered to be by the personal computer of drawing 1, and voice guidance are a flow chart for explaining LAN private branch exchange of drawing 1, and processing of a personal computer.

[0010] LAN1 shown in drawing 1 is the network which consisted of cables, such as 10BASE-T, and the sound signal on this LAN1 is transmitted by the voice packet containing sign sound signals, such as ADPCM. The LAN private branch exchange 17 which performs an exchange control of the second generation cordless telephone terminal 12-1 as a mobile-radio terminal called PHS (personal handicap phon system), 12-2, 12-3, LAN and CS (cell site) main phone 11-1 that are the base transceiver station equipment of 12-4, 11-2, 11-3, the **** terminal 23, a personal computer (PC)21, and LAN1 is connected to LAN1. The mass storage 18 like hard disk drive equipment and the character code-voice transducer 19 are connected to PC21.

[0011] Here, when installing in the service area of a museum, using this voice guide equipment as an example, LAN and the CS main phone 11-1 are arranged at exhibition area A, LAN and the CS main phone 11-2 are arranged at exhibition area B, and LAN and the CS main phone 11-3, and the **** terminal 23 are arranged at area (outlet lobby) C. Moreover, the character code of the voice guidance data of English, German, and Chinese is beforehand memorized for every areas A-C by the storage 18 connected to PC21. In addition, the loudspeaker of the telephone terminal 12-1 to 12-4 has not a hand set but desirable earphone and head set.

[0012] The address of the voice guidance data for every every areas A-C memorized by storage 18 as shown in drawing 2 at the memory in PC21, English, German, and Chinese is memorized by every base transceiver station (LAN and CS main phone 11-1 to 11-3). This voice guidance data is read by control of PC21 at the time of a guide, and is changed into an analog sound signal by the character code-voice transducer 19.

[0013] Moreover, the memory of PC21 has an area for memorizing a current position information

(number of LAN and the CS main phone 11-1 to 11-3 which is a base transceiver station), and a setting language every mobile-radio terminal (PHS) 12-1 to 12-4, as shown in drawing 3 . In case PHS 12-1 to 12-4 is lent to an user, the language of a request of an user is set as this area every PHS 12-1 to 12-4.

[0014] In such a configuration, while a radio voice link is formed between PHS 12-1 to 12-4, and a base transceiver station (LAN and CS main phone 11-1 to 11-3) If the link of a voice LAN packet is formed between a base transceiver station 11-1 to 11-3, and PC21 It becomes ready-for-sending ability from PC21 about a sound signal to PHS 12-1 to 12-4. Moreover, the number of a base transceiver station 11-1 to 11-3 is transmitted to the LAN private branch exchange 17 for every predetermined time as a positional information of the present of PHS 12-1 to 12-4 from a base transceiver station 11-1 to 11-3.

[0015] The LAN private branch exchange 17 will notify the positional information to PC21 combining the number of PHS12, and the number of a base transceiver station 11, if the positional information of the present of PHS12 is received through a base transceiver station 11-1 to 11-3 as shown in drawing 4 (step S1) (step S2). Next, it judges whether the position shown by this positional information differs from the current position of PHS12 memorized until now (step S3). When the current position is not changing, it returns to step S1. another side and when changing While the current position memorized is updated to the new current position, the radio voice link between the PHS12 and new base transceiver station 11, While controlling to form the link of the voice LAN packet between new base transceiver stations 11 and PCs21 (step S4), each number of the PHS12 and the new base transceiver station 11 is notified to PC21 (step S5). The dotted line shows the notice of steps S2 and S5 performed through LAN1 among drawing 4 .

[0016] If each number of this PHS12 and the new base transceiver station 11 is received (step S11), after PC21 will update the number of the base transceiver station 11 which is the current position of the PHS12 memorized as shown in drawing 3 , it reads the voice guidance according to the number of the PHS12, the number of the current position, and the setting language, and transmits it to the PHS12 through the link and radio voice link of a new voice LAN packet (step S12).

[0017] If according to such a configuration PHS 12-1 moves to area A of a base transceiver station 11-1 when "German" is set up, for example to PHS12, based on the number of PHS 12-1, the number of the base transceiver station 11-1 which is the current position, and a setting language, "a voice guidance of the German in area A" will be transmitted from PC21 to PHS 12-1. in addition, the case where PHS 12-1 moves to outlet lobby C which is the area of a base transceiver station 11-3 -- PC21 to the base transceiver station 11-3 -- minding -- PHS 12-1 -- receiving -- coming out -- there is nothing and "a voice guidance of the German of the purport for which I appreciate a visit" can also be transmitted to the **** terminal 23

[0018]

[Effect of the Invention] Voice guide equipment with easy operation can be realized, without becoming an ambient noise, since according to this invention an user is made to carry LAN radio terminal as a mobile-radio terminal and the voice guidance was transmitted to LAN radio terminal using the current position, as explained above. Again, since this invention transmitted the voice guidance to LAN radio terminal based on the positional information of LAN wireless-telephone terminal, and the modality of voice guidance, it can transmit the voice guidance from which each is different to two or more users located in the same area.

[Translation done.]

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Field

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Technique

[Description of the Prior Art] When it is going to transmit an information useful at the current position, i.e., an explanation of an exhibit, notes, etc., to the user under move in service areas, such as a museum and an amusement park, as use gestalt of this kind of voice guide equipment, the technique of a service area which fixes a loudspeaker and a head set to a position suitably, and broadcasts a voice guidance can be considered.

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Effect

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TECHNICAL PROBLEM

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MEANS

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[0013] Moreover, the memory of PC21 has an area for memorizing a current position information (number of LAN and the CS main phone 11-1 to 11-3 which is a base transceiver station), and a setting language every mobile-radio terminal (PHS) 12-1 to 12-4, as shown in drawing 3 . In case PHS 12-1 to 12-4 is lent to an user, the language of a request of an user is set as this area every PHS 12-1 to 12-4.

[0014] In such a configuration, while a radio voice link is formed between PHS 12-1 to 12-4, and a base transceiver station (LAN and CS main phone 11-1 to 11-3) If the link of a voice LAN packet is formed between a base transceiver station 11-1 to 11-3, and PC21 It becomes ready-for-sending ability from PC21 about a sound signal to PHS 12-1 to 12-4. Moreover, the number of a base transceiver station 11-1 to 11-3 is transmitted to the LAN private branch exchange 17 for every predetermined time as a positional information of the present of PHS 12-1 to 12-4 from a base transceiver station 11-1 to 11-3.

[0015] The LAN private branch exchange 17 will notify the positional information to PC21 combining the number of PHS12, and the number of a base transceiver station 11, if the positional information of the present of PHS12 is received through a base transceiver station 11-1 to 11-3 as shown in drawing 4 (step S1) (step S2). Next, it judges whether the position shown by this positional information differs from the current position of PHS12 memorized until now (step S3). When the current position is not changing, it returns to step S1. another side and when changing While the current position memorized is updated to the new current position, the radio voice link between the PHS12 and new base transceiver station 11, While controlling to form the link of the voice LAN packet between new base transceiver stations 11 and PCs21 (step S4), each number of the PHS12 and the new base transceiver station 11 is notified to PC21 (step S5). The dotted line shows the notice of steps S2 and S5 performed through LAN1 among drawing 4 .

[0016] If each number of this PHS12 and the new base transceiver station 11 is received (step S11), after PC21 will update the number of the base transceiver station 11 which is the current position of the PHS12 memorized as shown in drawing 3 , it reads the voice guidance according to the number of the PHS12, the number of the current position, and the setting language, and transmits it to the PHS12 through the link and radio voice link of a new voice LAN packet (step S12).

[0017] If according to such a configuration PHS 12-1 moves to area A of a base transceiver station 11-1 when "German" is set up, for example to PHS12, based on the number of PHS 12-1, the number of the

P11

base transceiver station 11-1 which is the current position, and a setting language, "a voice guidance of the German in area A" will be transmitted from PC21 to PHS 12-1. in addition, the case where PHS 12-1 moves to outlet lobby C which is the area of a base transceiver station 11-3 -- PC21 to the base transceiver station 11-3 -- minding -- PHS 12-1 -- receiving -- coming out -- there is nothing and "a voice guidance of the German of the purport for which I appreciate a visit" can also be transmitted to the **** terminal 23

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P12

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] It is the block diagram showing the 1 operation gestalt of the voice guide equipment concerning this invention.

[Drawing 2] It is explanatory drawing showing the voice guidance table registered into the personal computer of drawing 1.

[Drawing 3] It is explanatory drawing showing the table of the modality of the positional information memorized by the personal computer of drawing 1, and voice guidance.

[Drawing 4] It is a flow chart for explaining LAN private branch exchange of drawing 1, and processing of a personal computer.

[Description of Notations]

11-1 to 11-3 LAN and CS (cell site) main phone (base transceiver station)

12-1 to 12-4 Mobile-radio terminal (LAN wireless-telephone terminal)

17 LAN Private Branch Exchange

18 Storage (Storage Means)

21 Personal Computer (Voice Guidance Transmission-Control Means)

[Translation done.]

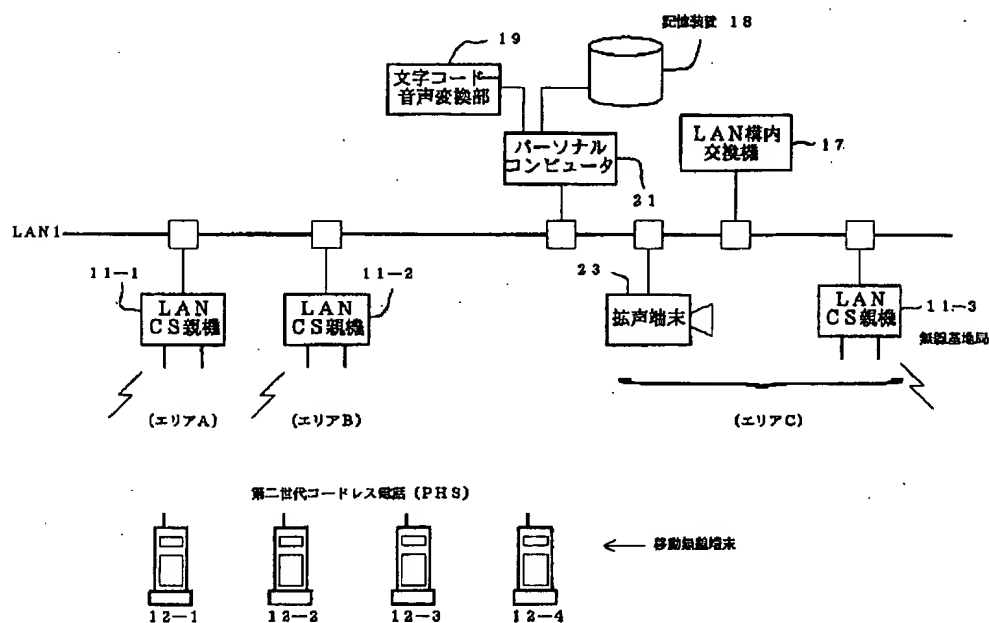
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DRAWINGS

[Drawing 1]



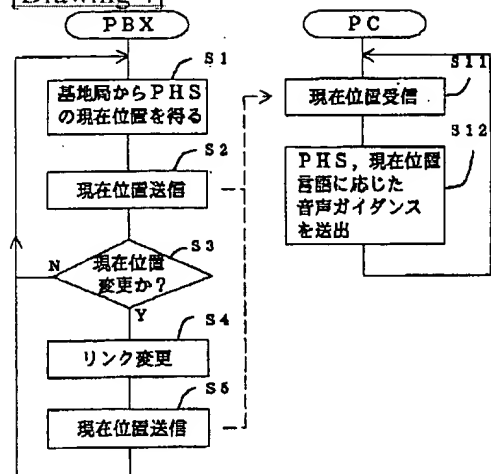
[Drawing 2]

アドレス	
基地局 1	エリアAの英語ガイダンス
	エリアAのドイツ語ガイダンス
	エリアAの中国語ガイダンス
基地局 2	エリアBの英語ガイダンス
	エリアBのドイツ語ガイダンス
	エリアBの中国語ガイダンス
基地局 3	エリアCの英語ガイダンス
	エリアCのドイツ語ガイダンス
	エリアCの中国語ガイダンス

[Drawing 3]

	現在位置	種類
PHS 1	基地局 1	英語
PHS 2	基地局 1	ドイツ語
PHS 3	基地局 3	中国語

[Drawing 4]



[Translation done.]

(19) 日本国特許庁 (J P)

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(11) 特許出願公開番号

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(43) 公開日 平成10年(1998)10月23日

(51) Int.Cl.⁶

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H 0 4 Q 7/04

D

H 0 4 H 1/00

H 0 4 H 1/00

J

H 0 4 R 27/00

H 0 4 R 27/00

Z

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(21) 出願番号

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平成9年(1997)4月4日

(71) 出願人 000004329

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(72) 発明者 石井 秀三

神奈川県横浜市神奈川区守屋町3丁目12番
地 日本ビクター株式会社内

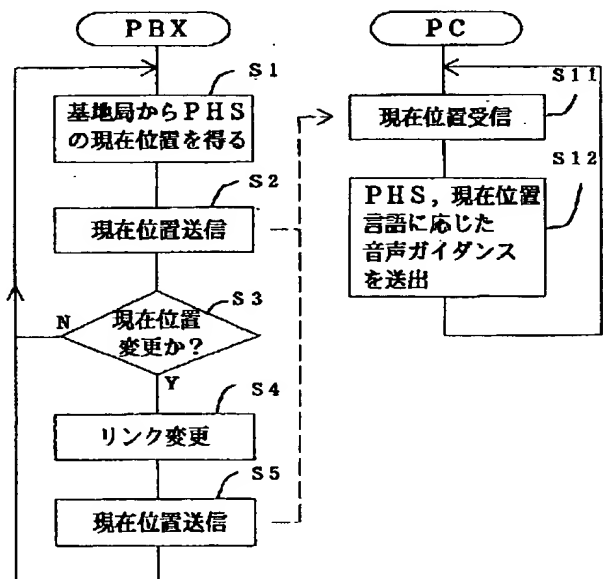
(74) 代理人 弁理士 二瓶 正敬

(54) 【発明の名称】 音声ガイド装置

(57) 【要約】

【課題】 ユーザにとって騒音となることもなく、操作が簡単であり、また、移動中の複数のユーザに対して個々の異なる音声ガイダンスを伝達する。

【解決手段】 LAN構内交換機17はPHS12の現在の位置情報が変化している場合、PHS12及び新しい無線基地局11との間の無線音声リンクと、新しい無線基地局11及びPC21との間の音声LANパケットのリンクを形成し、また、PHS12と新しい無線基地局11の各番号をPC21に通知する。PC21はこのPHS12と新しい無線基地局11の各番号を受信すると、PHS12、現在位置及び設定言語に応じた音声ガイダンスを読み出し、新しい音声LANパケットのリンクと無線音声リンクを介してそのPHS12に送信する。



【特許請求の範囲】

【請求項1】 移動する複数のユーザの各々が携帯する移動無線端末との間で無線信号を送受信することができ、それぞれがLANに接続されている複数の無線基地局と、

前記複数の無線基地局が配置されている各エリアに前記ユーザがいるときに取得すると有用な情報を音声ガイダンスとしてあらかじめ記憶している記憶手段と、

前記LANに接続され、前記複数の無線基地局を介して前記移動無線端末の位置情報を得て、前記位置情報に基づいて前記記憶手段に記憶されているエリア毎の音声ガイダンスを前記無線基地局を介して前記移動無線端末の各々に送信するよう前記複数の無線基地局を制御する音声ガイダンス送信制御手段とを、

有する音声ガイド装置。

【請求項2】 移動する複数のユーザの各々が携帯する移動無線端末との間で無線信号を送受信することができ、それぞれがLANに接続されている複数の無線基地局と、

前記複数の無線基地局が配置されている各エリアに前記ユーザがいるときに取得すると有用な情報を音声ガイダンスとしてあらかじめ記憶しているとともに、前記移動無線端末毎に前記音声ガイダンスの種類を示す情報をあらかじめ記憶している記憶手段と、

前記LANに接続され、前記複数の無線基地局を介して前記移動無線端末の位置情報を得て、前記位置情報と前記音声ガイダンスの種類を示す情報に基づいて前記記憶手段に記憶されているエリア毎に、かつ、前記音声ガイダンスの種類を示す情報により指定された種類の前記音声ガイダンスを前記無線基地局を介して前記移動無線端末の各々に送信するよう前記複数の無線基地局を制御する音声ガイダンス送信制御手段とを、

有する音声ガイド装置。

【請求項3】 前記音声ガイダンスが複数の言語で記憶され、前記音声ガイダンスの種類を示す情報が前記言語の種類を示すものである請求項2記載の音声ガイド装置。

【請求項4】 前記移動無線端末がPHS端末である請求項1ないし3のいずれか1つに記載の音声ガイド装置。

【発明の詳細な説明】

【0001】

【発明の属する技術分野】本発明は、情報伝達装置に関し、特に移動中のユーザに対して現在位置においてユーザに有用な情報を音声ガイダンスで伝達するための音声ガイド装置に関する。

【0002】

【従来の技術】この種の音声ガイド装置の利用形態として、例えば博物館、遊園地などのサービスエリアにおい

なわち展示品の説明や注意事項などを伝達しようとする場合、サービスエリアの適宜位置にスピーカやヘッドセットを固定して音声ガイダンスを放送する方法が考えられる。

【0003】

【発明が解決しようとする課題】しかしながら、スピーカを配置して音声ガイダンスを放送する方法では、美術館や博物館のように静寂が求められる利用形態では騒音となるという問題点があり、また、ヘッドセットを固定する方法では移動中のユーザにとって操作が面倒であるという問題点がある。

【0004】さらに、1つのエリアに1つのスピーカやヘッドセットを配置する方法では、1つのエリアでは1種類の音声ガイダンスしか放送することができず、複数のユーザに対して個々の異なる音声ガイダンスを放送することができないという問題点がある。なお、複数のユーザに対して個々の異なる音声ガイダンスを伝達する利用形態としては、例えば同一内容の音声ガイダンスを英語、ドイツ語、中国語のように異なる言語で伝達することが考えられる。

【0005】本発明は上記問題点に鑑み、ユーザにとって騒音となることもなく、操作が簡単な音声ガイド装置を提供することを目的とする。本発明はまた、同一エリアに位置する複数のユーザに対して個々の異なる音声ガイダンスを伝達することができる音声ガイド装置を提供することを目的とする。

【0006】

【課題を解決するための手段】本発明は上記目的を達成するために、LANにおいては移動無線端末であるLAN無線端末の現在位置に基づいてLAN音声パケットのリンクを確立していることに鑑み、LAN無線電話端末をユーザに携帯させてその現在位置に基づいて音声ガイダンスをLAN無線電話端末に送信するようにしたものである。本発明はまた、LAN無線電話端末の位置情報と音声ガイダンスの種類を示す情報に基づいて、所定種類の音声ガイダンスを所定のLAN無線端末に送信するようにしたものである。

【0007】すなわち本発明によれば、移動する複数のユーザの各々が携帯する移動無線端末との間で無線信号を送受信することができ、それぞれがLANに接続されている複数の無線基地局と、前記複数の無線基地局が配置されている各エリアに前記ユーザがいるときに取得すると有用な情報を音声ガイダンスとしてあらかじめ記憶している記憶手段と、前記LANに接続され、前記複数の無線基地局を介して前記移動無線端末の位置情報を得て、前記位置情報に基づいて前記記憶手段に記憶されているエリア毎の音声ガイダンスを前記無線基地局を介して前記移動無線端末の各々に送信するよう前記複数の無線基地局を制御する音声ガイダンス送信制御手段とを、

【0008】また、本発明によれば、移動する複数のユーザの各々が携帯する移動無線端末との間で無線信号を送受信することができ、それぞれがLANに接続されている複数の無線基地局と、前記複数の無線基地局が配置されている各エリアに前記ユーザがいるときに取得すると有用な情報を音声ガイダンスとしてあらかじめ記憶しているとともに、前記移動無線端末毎に前記音声ガイダンスの種類を示す情報をあらかじめ記憶している記憶手段と、前記LANに接続され、前記複数の無線基地局を介して前記移動無線端末の位置情報を得て、前記位置情報と前記音声ガイダンスの種類を示す情報に基づいて前記記憶手段に記憶されているエリア毎に、かつ、前記音声ガイダンスの種類を示す情報により指定された種類の前記音声ガイダンスを前記無線基地局を介して前記移動無線端末の各々に送信するよう前記複数の無線基地局を制御する音声ガイダンス送信制御手段とを、有する音声ガイド装置が提供される。

【0009】

【発明の実施の形態】以下、図面を参照して本発明の実施の形態を説明する。図1は本発明に係る音声ガイド装置の一実施形態を示すブロック図、図2は図1のパーソナルコンピュータに登録される音声ガイダンステーブルを示す説明図、図3は図1のパーソナルコンピュータに記憶される位置情報及び音声ガイダンスの種類のテーブルを示す説明図、図4は図1のLAN構内交換機及びパーソナルコンピュータの処理を説明するためのフローチャートである。

【0010】図1に示すLAN1は例えば10BASE-Tなどのケーブルで構成されたネットワークであり、このLAN1上の音声信号はADPCMなどの符号音声信号を含む音声パケットで送信される。LAN1には、PHS（パーソナル・ハンディフォン・システム）と呼ばれる移動無線端末としての第二世代コードレス電話端末12-1、12-2、12-3、12-4の無線基地局装置であるLAN・CS（セル・サイト）親機11-1、11-2、11-3と、拡声端末23と、パーソナルコンピュータ（PC）21と、LAN1の交換制御を行うLAN構内交換機17が接続されている。PC21には例えばハードディスクドライブ装置のような大容量の記憶装置18と文字コード-音声変換部19が接続されている。

【0011】ここで、この音声ガイド装置を一例として博物館のサービスエリアに設置する場合、LAN・CS親機11-1が展示エリアAに配置され、LAN・CS親機11-2が展示エリアBに配置され、LAN・CS親機11-3と拡声端末23がエリア（出口ロビー）Cに配置される。また、PC21に接続された記憶装置18にはあらかじめ、エリアA～C毎に例えば英語、ドイツ語、中国語の音声ガイダンスデータの文字コードが記

かは、ハンドセットではなく、イヤホンやヘッドセットが望ましい。

【0012】PC21内のメモリには、図2に示すように記憶装置18に記憶されたエリアA～C毎及び英語、ドイツ語、中国語毎の音声ガイダンスデータのアドレスが無線基地局（LAN・CS親機11-1～11-3）毎に記憶される。この音声ガイダンスデータはガイド時にPC21の制御により読み出され、文字コード-音声変換部19によりアナログ音声信号に変換される。

10 【0013】また、PC21のメモリは、図3に示すように移動無線端末（PHS）12-1～12-4毎に現在位置情報（無線基地局であるLAN・CS親機11-1～11-3の番号）と設定言語を記憶するためのエリアを有し、PHS12-1～12-4がユーザに貸与される際に、このエリアにユーザの所望の言語がPHS12-1～12-4毎に設定される。

20 【0014】このような構成において、PHS12-1～12-4と無線基地局（LAN・CS親機11-1～11-3）の間に無線音声リンクが形成されるとともに、無線基地局11-1～11-3とPC21との間に音声LANパケットのリンクが形成されると、PC21からPHS12-1～12-4に対して音声信号を送信可能となり、また、所定時間毎に無線基地局11-1～11-3からLAN構内交換機17に対してPHS12-1～12-4の現在の位置情報として無線基地局11-1～11-3の番号が送信される。

30 【0015】LAN構内交換機17は図4に示すように、無線基地局11-1～11-3を介してPHS12の現在の位置情報を受信すると（ステップS1）、その位置情報をPHS12の番号と、無線基地局11の番号とを組み合わせてPC21に通知する（ステップS2）。次に、この位置情報にて示される位置が、これまでに記憶されているPHS12の現在位置と異なるかを判断する（ステップS3）。現在位置が変化していない場合にはステップS1に戻り、他方、変化している場合には、記憶されている現在位置を新しい現在位置に更新するとともに、そのPHS12及び新しい無線基地局11との間の無線音声リンクと、新しい無線基地局11及びPC21との間の音声LANパケットのリンクを形成するように制御するとともに（ステップS4）、そのPHS12と新しい無線基地局11の各番号をPC21に通知する（ステップS5）。図4中、点線はLAN1を介して行われるステップS2、S5の通知を示している。

40 【0016】PC21はこのPHS12と新しい無線基地局11の各番号を受信すると（ステップS11）、図3に示すように記憶されているそのPHS12の現在位置である無線基地局11の番号を更新した後、そのPHS12の番号、現在位置の番号及び設定言語に応じた音

リンクと無線音声リンクを介してそのPHS12に送信する(ステップS12)。

【0017】このような構成によれば、例えばPHS12に対して「ドイツ語」が設定された場合、PHS12-1が無線基地局11-1のエリアAに移動すると、PHS12-1の番号と、現在位置である無線基地局11-1の番号と設定言語に基づいてPC21からPHS12-1に対して「エリアAにおけるドイツ語の音声ガイダンス」が送信される。なお、PHS12-1が無線基地局11-3のエリアである出口ロビーCに移動した場合、PC21から無線基地局11-3を介してPHS12-1に対してではなく、拡声端末23に対して「来館に感謝する旨のドイツ語の音声ガイダンス」を送信することもできる。

【0018】

【発明の効果】以上説明したように本発明によれば、移動無線端末としてのLAN無線端末をユーザに携帯させてその現在位置を利用して音声ガイダンスをLAN無線端末に送信するようにしたので、騒音となることもなく、また、操作が簡単な音声ガイド装置を実現することができる。本発明はまた、LAN無線電話端末の位置情報と音声ガイダンスの種類に基づいて音声ガイダンスを

LAN無線端末に送信するようにしたので、同一エリアに位置する複数のユーザに対して個々の異なる音声ガイダンスを伝達することができる。

【図面の簡単な説明】

【図1】本発明に係る音声ガイド装置の一実施形態を示すブロック図である。

【図2】図1のパーソナルコンピュータに登録される音声ガイダンステーブルを示す説明図である。

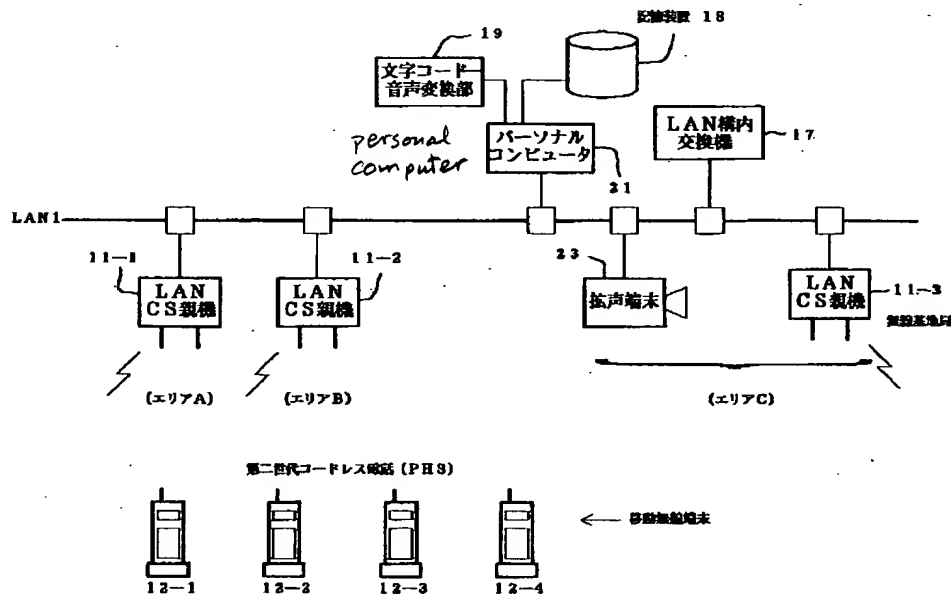
【図3】図1のパーソナルコンピュータに記憶される位置情報及び音声ガイダンスの種類のテーブルを示す説明図である。

【図4】図1のLAN構内交換機及びパーソナルコンピュータの処理を説明するためのフローチャートである。

【符号の説明】

11-1～11-3 LAN・CS(セル・サイト)親機(無線基地局)
12-1～12-4 移動無線端末(LAN無線電話端末)
17 LAN構内交換機
18 記憶装置(記憶手段)
21 パーソナルコンピュータ(音声ガイダンス送信制御手段)

【図1】



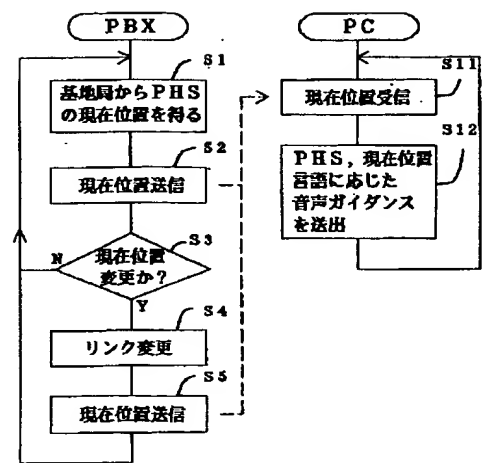
【図2】

アドレス	
基地局1	エリアAの英語ガイダンス
	エリアAのドイツ語ガイダンス
	エリアAの中国語ガイダンス
基地局2	エリアBの英語ガイダンス
	エリアBのドイツ語ガイダンス
	エリアBの中国語ガイダンス
基地局3	エリアCの英語ガイダンス
	エリアCのドイツ語ガイダンス
	エリアCの中国語ガイダンス

【図3】

現在位置		種類
PHS1	基地局 1	英語
PHS2	基地局 1	ドイツ語
PHS3	基地局 3	中国語

【図4】



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